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## NOTICE OF ALLOWANCE AND FEE(S) DUE

61060

7590

09/02/2008

WINSTEAD PC  
P.O. BOX 50784  
DALLAS, TX 75201

EXAMINER

YUN, EUGENE

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 09/02/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,122	02/23/2001	Graham Murdoch	61229-00005USPX	5606

TITLE OF INVENTION: TRANSCEIVER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	12/02/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

**Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

61060 7590 09/02/2008

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## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,122	02/23/2001	Graham Murdoch	61229-00005USPX	5606

TITLE OF INVENTION: TRANSCIEVER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	12/02/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
YUN, EUGENE	2618	455-082000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/147; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.111. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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61060	7590	09/02/2008	EXAMINER	
WINSTEAD PC P.O. BOX 50784 DALLAS, TX 75201			Y'UN, EUGENE	
			ART UNIT	PAPER NUMBER

2618  
DATE MAILED: 09/02/2008

## Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

09/601,122

**Examiner**

EUGENE YUN

**Applicant(s)**

MURDOCH, GRAHAM

**Art Unit**

2618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/25/2008.
2. ☒ The allowed claim(s) is/are 1,37-42,44-69,73 and 74.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of the:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Eugene Yun/  
Primary Examiner, Art Unit 2618

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/25/2008 has been entered.

***Allowable Subject Matter***

2. Claims 1, 37-42, 44-69, 73, and 74 are allowed.

Regarding Claim 1, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed between the antenna and the signal processor for providing a fourth signal to the antenna for forming the second signal, the modulator varying the impedance between the antenna and the signal processor for providing the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first signal and low for the second signal.

Regarding Claim 37, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed in series between the antenna and the signal processor for providing a fourth electrical signal to the antenna to produce the second RF electromagnetic signal, the modulator varying the series impedance between the

antenna and the signal processor; and wherein the modulator varies the impedance between the antenna and the signal processor, such that the antenna simultaneously has a high Q factor for signals received by the antenna and a low Q factor for signals transmitted from the antenna.

Claims 38-42 and 44-48 depend on claim 37.

Regarding Claim 49, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, varying the impedance between the antenna and the signal processor, and wherein the step of varying provides the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first RF electromagnetic signal and low for the second RF electromagnetic signal.

Regarding Claim 50, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed in series between the antenna and the power storage means for selectively varying the impedance therebetween to generate the second RF electromagnetic signal and provide the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first RF electromagnetic signal and low for the second RF electromagnetic signal; and

a mixer for producing a fifth signal by combining the fourth electrical signal with a sub-carrier, the fifth signal being provided to the modulator.

Claims 51-53 depend on claim 50.

Regarding Claim 54, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed in series with the coil, said first and second currents flowing through said modulator for providing said coil with a simultaneous dual Q factor, the Q factor being high for the first current and low for the second current.

Claims 55 and 56 depend on claim 54.

Regarding Claim 57, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed in series between the antenna and the signal processor for providing a fourth electrical signal to the antenna to produce the second signal, the modulator varying the voltage across the antenna in a substantially stepwise manner to effect a variation in the current flowing through the antenna between a low and a high value for allowing transmission of the second signal without substantially affecting the receiving efficiency of the antenna, wherein the modulator is adapted to further provide the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first RF electromagnetic signal and low for the second RF electromagnetic signal.

Claim 58 depends on claim 57.

Regarding Claim 59, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, varying the impedance of the modulator, thereby to vary the voltage across the antenna in a substantially stepwise manner to effect a variation in the current

flowing through the antenna between a low and a high value for allowing transmission of the second signal without substantially effecting the receiving efficiency of the antenna; and

wherein the step of varying provides the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first RF electromagnetic signal and low for the second electrical signal.

Regarding Claim 60, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed in series between the antenna and the tuning circuitry for varying the impedance therebetween such that the second signal generates a third electrical signal in the antenna at a second predetermined frequency and the antenna transmits a fourth RF electromagnetic signal derived from the third signal: and

wherein the modulator is adapted to provide the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first RF electromagnetic signal and low for the second RF electromagnetic signal.

Claims 61-69 depend on claim 60.

Referring to Claim 73, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed between the antenna and the signal processor for providing a fourth signal to the antenna for forming the second signal, the modulator varying the impedance between the antenna and the signal processor for providing the



antenna with a simultaneous dual Q-factor, the Q-factor being high for the first signal and low for the second signal.

Referring to Claim 74, Urbas (US 5,481,262 "IDS"), Schuermann (US 5,374,930), Seiko (JP 1-298817), and Schuermann (US 5,451,958) do not teach, alone nor in combination, a modulator disposed between the antenna and the signal processor for providing a fourth signal to the antenna for forming the second signal, the modulator varying the impedance between the antenna and the signal processor for providing the antenna with a simultaneous dual Q-factor, the Q-factor being high for the first signal and low for the second signal.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun  
Primary Examiner  
Art Unit 2618

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